## **AMENDMENTS TO THE CLAIMS:**

The listing of claims will replace all prior versions, and listings of claims in the application:

## **LISTING OF CLAIMS:**

1. (Currently amended) A computer-implemented method of detecting new events comprising the steps of:

determining at least one story characteristic based on an average story similarity story characteristic and a same event-same source story characteristic;

determining a source-identified story corpus, each story associated with at least one event;

determining a source-identified new story associated with at least one event; determining story-pairs based on the source-identified new-story and each story in the source-identified story corpus;

determining at least one inter-story similarity metric for the story-pairs; wherein the inter-story similarity metrics are comprised of at least one story frequency model; and at least one story characteristic frequency model combined using terms weights; and wherein an event frequency is determined based on term t and ROI category t max from the formula:  $ef_{t,max}(t) = \frac{max}{r \in R} (ef(t,t))$ ;

determining at least one adjustment to the inter-story similarity metrics based on at least one story characteristic; and

outputting a new story event indicator if the event associated with the new story is similar to the events associated with the source-identified story corpus based on the inter-story similarity metrics and the adjustments.

- 2. (Previously presented) The method of claim 1, wherein the inter-story similarity metric is dynamically adjusted based on at least one of subtraction and division.
- 3. (Original) The method of claim 1, wherein the inter-story similarity metric is at

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least one of a probability based inter-story similarity metric and a Euclidean based interstory similarity metric.

- 4. (Original) The method of claim 3, wherein the probability based inter-story similarity metric is at least one of a Hellinger, a Tanimoto, a KL divergence and a clarity distance based metric.
- 5. (Original) The method of claim 3, wherein the Euclidean based similarity metric is a cosine-distance based metric.
- 6. (Original) The method of claim 1, wherein the inter-story similarity metrics are determined based on a term frequency-inverse story frequency model.
- 7. (Original) The method of claim 1, wherein the inter-story similarity metrics are comprised of: at least one story frequency model; and at least one event frequency model combined using terms weights.
- 8. (Canceled)
- 9. (Currently amended) The method of claim-8\_1, where the adjustments based on the story characteristics are applied to the term weights.
- 10. (Currently amended) The method of claim-8\_1, where the adjustments based on the story characteristics are applied to the inter-story similarity metrics.
- 11. (Original) The method of claim 1, wherein the inter-story similarity metrics are comprised of at least one term frequency-inverse event frequency model and where the events are classified based on at least one of: story labels and a predictive model.
- 12. (Canceled)

13. (Currently amended) The method of claim 8, A computer-implemented method of
detecting new events comprising the steps of:
determining at least one story characteristic based on an average story similarit
story characteristic and a same event-same source story characteristic;
determining a source-identified story corpus, each story associated with at least
one event;
determining a source-identified new story associated with at least one event;
determining story-pairs based on the source-identified new-story and each story
in the source-identified story corpus;
determining at least one inter-story similarity metric for the story-pairs; wherein
the inter-story similarity metrics are comprised of at least one story frequency model;
and at least one story characteristic frequency model combined using terms weights;
$\underline{\text{and}}$ wherein an inverse event frequency is determined based on term $t$ , and events $e$
and max in the set of ROI categories from the formula: $IEF(t) = \log \left[ \frac{N_{e,r_{\text{max}}}}{ef_{r_{\text{max}}}(t)} \right]$ ;
determining at least one adjustment to the inter-story similarity metrics based or
at least one story characteristic; and
outputting a new story event indicator if the event associated with the new story
is similar to the events associated with the source-identified story corpus based on the
inter-story similarity metrics and the adjustments.
14. (Currently amended) The method of claim 8, A computer-implemented method of
detecting new events comprising the steps of:
determining at least one story characteristic based on an average story similarity
story characteristic and a same event-same source story characteristic;
determining a source-identified story corpus, each story associated with at least
one event;
determining a source-identified new story associated with at least one event;
determining story-pairs based on the source-identified new-story and each story
in the source-identified story corpus;
determining at least one inter-story similarity metric for the story-pairs; wherein

the inter-story similarity metrics are comprised of at least one story frequency model; and at least one story characteristic frequency model combined using terms weights; and wherein an inverse event frequency is determined based on term t, categories e, r and rmax in the set of ROI categories and P(r), the probability of ROI r from the formula:

$$IEF'(t) = \sum_{r \in R} P(r) \log \left[ \frac{N_{e,r}}{ef(r,t)} \right]$$

determining at least one adjustment to the inter-story similarity metrics based on at least one story characteristic; and

outputting a new story event indicator if the event associated with the new story is similar to the events associated with the source-identified story corpus based on the inter-story similarity metrics and the adjustments.

15. (Original) The method of claim 1 further comprising the step of determining a subset of stories from the source-identified story corpus and the source-identified new story based on at least one story characteristic.

16-36. (Canceled)

37. (Previously presented) The computer-implemented method of claim 1, in which the new event indicator is displayed on at least one of a visual, audio or tactile output device.

38-39. (Canceled)